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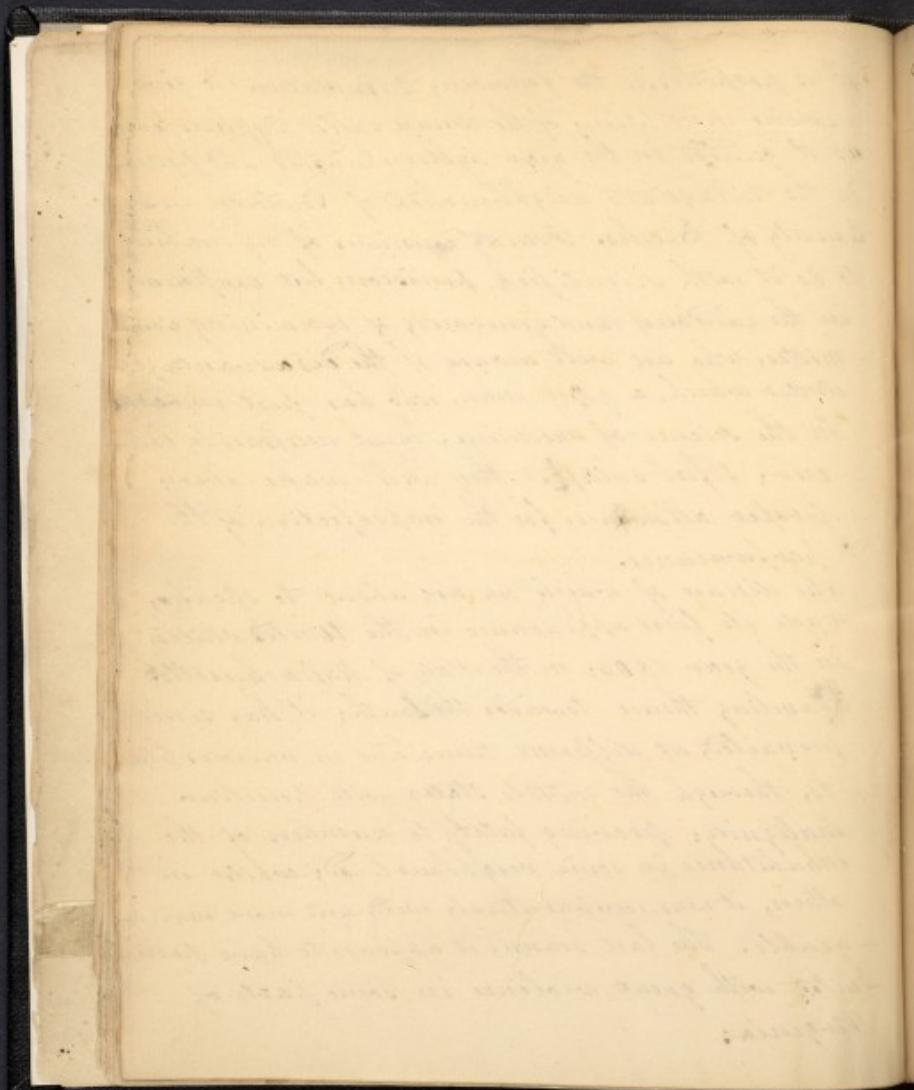
A Dissertation  
upon  
The African denominated Zyghee fever

By John W Jenkins of N. Jersey  
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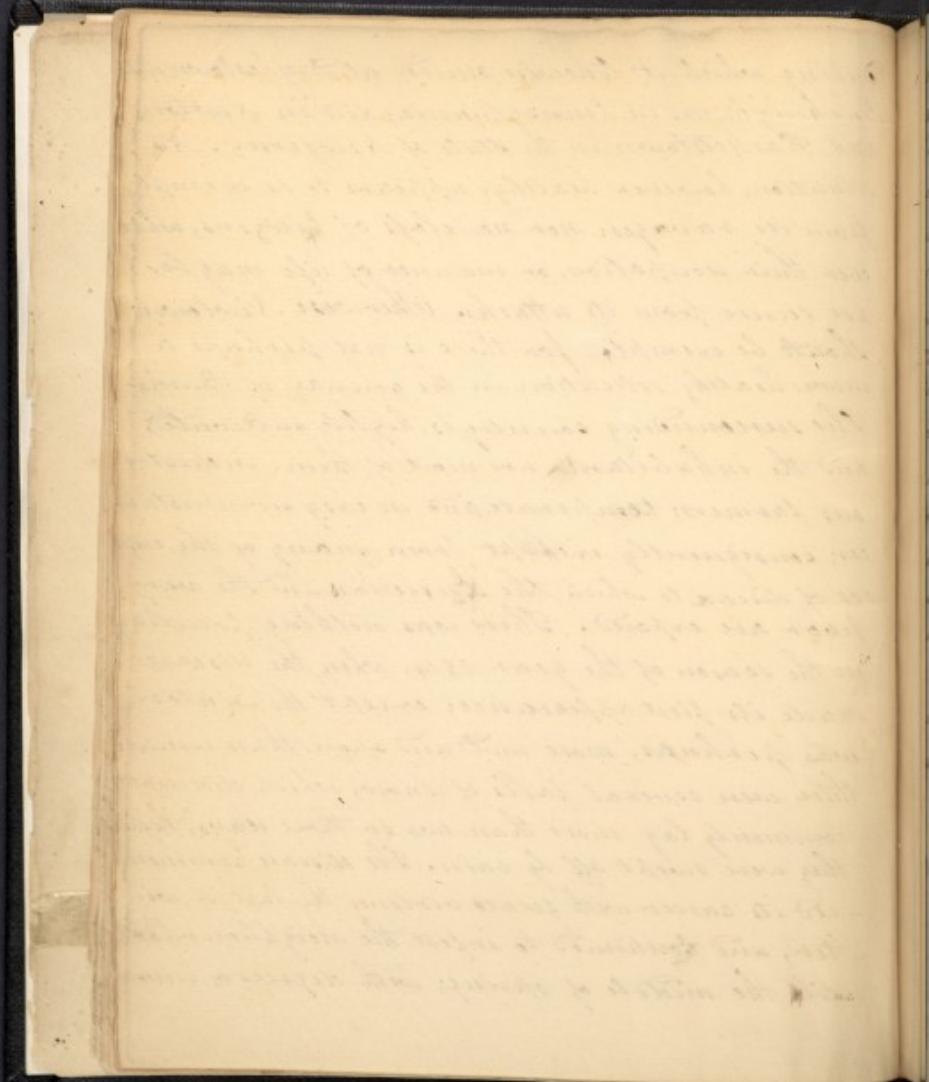
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It is proposed, in the following Dissertation to give a concise description, of the disease called Typhus fever, as it occurred in the year eighteen hundred and fifteen, in the village and neighbourhood of Newington in the County of Bucks. Feeling conscious of my inability to do it with scientifick precision; but confiding in the candour and generosity of examining committee, who are well aware of the disadvantages, under which, a young man, who has, just embarked in the science of medicine, must necessarily labour; I feel satisfied they will make every proper allowance, for the imperfection of the performance.

The disease of which we are about to speak, made its first appearance in the United States, in the year 1806, in the State of Massachusetts. Traveling thence towards the South, it has since prevailed, at different times and in various places, through the middle states with peculiar malignity; proving fatal to numbers of the inhabitants in some neighbourhood; whilst in others, it was comparatively mild, and more manageable. The last season, it appears to have prevailed with great violence in some parts of Virginia:



During which, it likewise occurred at Doylestown and  
Buckingham, in Pennsylvania; and in Newton,  
and Hackensack in the State of New Jersey. No  
situation, however healthy, appears to be exempt  
from its ravages: nor no class of citizens, what-  
ever their occupation, or manner of life may be:  
are secure from its attacks. Otherwise Newton  
should be exempted, for there is not perhaps a  
more healthy situation in the county of Bucks.  
The surrounding country is highly cultivated,  
and the inhabitants are most of them, industri-  
ous farmers; temperate, and in easy circumstan-  
ces; consequently except from many of the cau-  
ses of disease to which the ~~superior~~ and the very  
poor are exposed. There was nothing peculiar  
in the season of the year 1814, when the disease  
made its first appearance; except the winter  
was perhaps, more mild and open, than usual:  
there were several falls of snow, which did not  
commonly lay more than two or three days, before  
they were swept off by rain. The disease commen-  
ced its career with great violence the last of win-  
ter, and continued to infest the neighbourhood,  
until the middle of spring; with degrees of in-  
-



invariably, as variolous the persons, who were attacked; and the periods at which it occurred. Some were seized with extreme debility at the commencement, so as not to be able to help themselves; others were first attacked with blueness, and insensibility of the surface of the body, coldness of the extremities, and different grades of delirium; many were warned of its approach, by dizziness, tremors, and dull pain in various parts of the body; and in some it put on the more insidious, but not less fatal garb of hysteria and catalepsy. But as the warm weather advanced, it gradually subsided; and during the summer entirely disappeared. It however reappeared in the autumn, a few sporadic cases occurred, and diseases generally were less inflammatory than they usually are, at that season; particularly in the months of November and December; during which the weather was changeable, and wet. The winter of eighteen-hundred and fifteen, was extremely cold, the ground was covered with snow from the middle of January, until the seventh or eighth of March. About the twenty fifth of January the disease made its appearance in Doylestown and Buckingham, with its characteristic malignity



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Not more than one eighth or tenth of those who were attacked, when it first appeared recovered. On the tenth of February, it was again observed at Newtown; but it was much less fatal, and perhaps less violent, than in the above-mentioned places. It was principally confined to females, out of seventeen persons, who were labouring under the disease at one time, only two were males. This disposition to attack females continued during its prevalence; those who were pregnant, were the least subject to it; but two cases were observed during its existence. The manner of attack was very various; but generally less violent, than it was the preceding year. Though some were seized with the most ungovernable delirium; yet it more commonly came on, with coma, pain in the loins, extremities, sides and head, chills were common, and in some it made its first appearance, by nausea and vomiting of a bilious matter; accompanied with cold extremities. There are most of the leading symptoms, that occurred in the different persons, who were attacked by this new and formidable enemy.

For many of the preceding, and most of the



Succeeding symptoms and observations upon the disease, I must acknowledge myself indebted, to the attention and politeness of my preceptor Dr P. Jenks, who oblige me with a set of notes. Having given this brief view of the symptoms, that indicate the approach of the disease; we shall now proceed to give a more particular detail of them, as they occurred in the assimilating and relative functions.

of the assimilating functions ~~under~~ which are Comprehended, Digestion, Absorption, Circulation, Respiration, and Secretion and excretion.

Digestion. This function was generally much impeded, the tongue was dry and covered with a muddy white or yellow crust, often of a dark brown or livid hue; and sometimes of a fiery red colour. The appetite was diminished or entirely gone; the nausea and vomiting, were often distressing, and commonly attended with some discharge of bile; which was sometimes of a dark or green colour, but more frequently natural. The intestines were usually, but little affected, a few cases occurred, in which a slight Diarrhea was observed; but they were seldom if ever attacked with pain, sometimes slightly constipated.



The Absorbents did not appear to partake in  
the disease.

The Sanguiferous system. In most cases the heart  
and arteries, at the access of the disease, were incre-  
ased greatly in frequency and slightly inflam-  
ed; the pulse was often irregular; and appeared to  
discover some hardness; but this was not univer-  
sal, for it was sometimes diminished in force from  
the commencement of the disease: and even in  
those cases where it discovered the highest degree  
of inflammatory action, it would not admit of  
the least discreet abstraction; without inducing  
a dangerous degree of Debility. Hemorrhagy  
from the Lungs was not uncommon, few cases  
occurred, in which there was not <sup>at</sup> some period of  
the disease, discharge of blood from them: frequen-  
tly about the third or fourth day, sometimes  
earlier. The Breathing, was often diffi-  
cult, and usually attended on the first two or  
three days, with a short dry cough, which was  
very troublesome to the patient. The heat of  
the body was somewhat increased on the first  
days of the disease; but was most frequently of  
short duration, and usually preceded by a chille.



Some pain and soreness of the breast insides and the respiration, as the disease advanced, not unfrequently became extremely laborious; producing great anxiety and dejection; which was strikingly depicted in the countenance of the patient.

The secretions and excretions. The secretions and sev-  
eral organs were very little affected; pain in the  
region of the liver was sometimes complained of,  
but probably, was more frequently the consequence  
of debility, than of increased action. There appear-  
ed to be a redundancy of bile in some cases, but  
it was, as has been before observed, commonly —  
natural. The kidneys were torpid, but seldom  
affected with pain; the urine was secreted in small  
quantity, and in some cases high coloured, but more  
usually natural. Sweating was not so common  
as in the preceding year, neither was it attended  
with as salutary an effect; it however somet-  
imes occurred, and was accompanied with such  
an offensive smell, that it rendered the patients  
loathsome to themselves and their friends.

The Relative functions. Under this head are  
comprised the senses and voluntary motion.  
The Brain was frequently very much disordered,

the same time  
and when I was writing  
in the middle of the page  
I wrote over some writing  
that I had written all in red  
ink in the margin. I will tell you what it is  
now, and say what was written and  
what was written over with a red  
pen. It is now a copy of the  
whole page written over with a red  
pen. Now, the first sentence is as follows:  
"I am a good man and a good  
husband and a good son and a good  
brother and a good neighbour and a good  
friend and a good citizen and a good  
man." The second sentence is as follows:  
"I am a good man and a good  
husband and a good son and a good  
brother and a good neighbour and a good  
friend and a good citizen and a good  
man." The third sentence is as follows:  
"I am a good man and a good  
husband and a good son and a good  
brother and a good neighbour and a good  
friend and a good citizen and a good  
man."

and its functions in all serious cases, were carried on with difficulty. A violent delirium frequently occurred, during which the patients raved incessantly, and were with difficulty confined to their beds. This was always an alarming, and sometimes a fatal symptom; particularly if it occurred on the third or fourth day. It tended to exhaust the patient's strength, and bring on an almost unconquerable degree of debility; and it often thwarted the expectations of their friends, and the designs of their physician, as it not unfrequently, was extremely difficult to get them to take medicine. A low muttering delirium occurred in some cases, when the patient would lay ~~up~~<sup>up</sup> apparently, in a comatose state, muttering at intervals and uttering incoherent expressions. The eyes were often red and inflamed; sometimes, they had a muddy appearance, and in many instances had lost their accustomed sensibility. The hearing, this season was but little impaired, though deafness the preceding year was common. The functions of the olfactories were undisturbed. The taste was considerably deranged as might be expected from the abovementioned state of the tongue. The sense of feeling was so much obtunded in many cases, that the patients appeared



to have lost almost entirely, their connection with surrounding objects through that medium. The insensibility, in some cases, was so great, that blisters and scissars did not excite any unpleasant sensation. Through the system was insensible to external impressions, which at another time would have been painful; yet it was sensible to that pain, which was the consequence of the disease in the back, sides, and breast; it was very distressing, and in the head, it was so severe, shooting from one temple to the other, that the patients, in many cases, were induced to believe, some person was piercing their heads with some pointed instrument.

The voluntary muscles were often called into violent action, as was hinted above when speaking of delirium; the strength was so much increased, that it was difficult managing the patient. This however was of short duration, for the muscular strength in most cases, was speedily exhausted, and they became extremely weak and unable to help themselves. At this period, the action of the muscles not un frequently became irregular, spasmodick contraction of the algeus muscle took place; twichings of the eye lids

huisen tot dezen tot den dageraad velen  
vrouwenvaders van ons lande en in  
den oosten vermaarden overal dat de  
vaders te vrees hadden dat er in  
de nacht een storm zou ontstaan en  
dat de volle maan niet kon worden gezien  
want de volle maan moet worden gezien om  
dat de volgende dag goed te gaan want  
men moet eerst een goede nacht hebben om  
daarna een goede dag te hebben

Daarom waren velen die vandaag  
van hun huizen weg moesten van vooruitzicht  
van een storm die vandaag zou ontstaan  
die vrees had dat de volle maan niet  
zou kunnen worden gezien want  
men moet eerst een goede nacht hebben om  
daarna een goede dag te hebben

were likewise observed in some cases, and in others they fell as if unsupported, half closing the eyes; now unless some assistance were speedily obtained the fatal monster soon seized his prey.

Having given this brief account of the symptoms, which occurs in the different persons, during the prevalence of the disease; according to the arrangement we have adopted we shall now proceed to offer a few observations upon the Diagnosis.

By proper attention to the preceding symptoms, with an eye to the laws of epidemicks, it will not be found very difficult to form a sufficiently correct opinion of the nature of the disease. The only ones with which a person would be in danger of confounding it, are, the Pleurisy, and the common Typhus fever of Dr. Cullen. Mistaking it for the former, might be productive of disagreeable reflections to the Physician, and the most fatal consequences to the patient; though in some cases, there may be some difficulty in distinguishing them; yet by strict attention to the state of the pulse, which in the one is small and slightly hard but yielding to pressure; whilst in the other, it is more full, hard, unyielding and less frequent. With regard to the latter, it is not of much importance to distinguish



them, for the method of cure is similar in each

The remote cause appears to be involved in obscurity. There is nothing in the situation of the place, as has been already observed, that will enable us to account for it; nor notwithstanding that will serve as a guide to our inquiries.

Yet from the circumstance of the disease prevailing so generally through the neighbourhood, and from its having affected so many persons at the same time, it appears somewhat probable, that there was some cause, however occult, existing in the atmosphere at the particular seasons and places at which it has occurred. Although I must acknowledge myself ignorant of that cause, not having had an opportunity of ascertaining by actual experiment, the composition of the air at the time in which the disease appeared; yet I can not help being struck with the analogy that subsists between many of the symptoms of this disease, and that, produced by inhaling carbonic acid gas. From this analogy, from the seasons at which it appeared, and from the state of the weather during those seasons; which was unusually mild and open; might it not, with some reason, be inferred that this was the cause? Particularly



when it is recollect'd, that all those causes, which concur  
to favour the decomposition of vegetables, and the  
formation of this species of gas, were in full operation.  
This together with the usual consumption of oxygen  
at that season, by combustion and respiration; and the  
consequent formation of carbonic acid, would necessarily  
by have a tendency to contaminate the atmosphere.  
Vegetation, that grand laboratory of nature, in which, there  
are so many operations, subservient to the animal being,  
done unceas'd, being likewise suspended, gives still far-  
ther probability to the hypothesis. The predisposing cause  
Admitting the remote cause to exist in the atmosphere,  
whether it shall be found, to be carbonic acid or any  
other one, of the non respirable gases, or a combina-  
tion of them, acting alone or in concert with some  
other cause; as grief, anxiety, intemperance of any  
kind, or excessive fatigue, may produce a sufficient  
degree of debility to predispose the system to the disease.  
The Exciting Causes. They are numerous and vari-  
ous; any substance acting, either chemically or mech-  
anically, upon a system already predispos'd may  
excite the disease. The same cause may act as remote  
predisposing and exciting, according to the varia-  
tions of its intensity; sudden transitions from



a cold to a warm atmosphere and visa versa; loss of rest from any cause, but particularly from attending on the sick; intemperance, in eating or drinking, and giving a loose to the passions, often prove exciting causes. With respect to the proximate cause, I acknowledge myself profoundly ignorant; neither does a knowledge of it appear to be of much consequence, to the Physician who prescribes for the state of the system. Which seems to be satisfactorily proven, by the number that have existed in the imaginations of different authors. A leton in the blood, spasm in the extreme vessels, and a convulsive or irregular action in the arterial system, have successively prevailed; and their different authors, appear to have practised under the guidance of each with success.

The Prognosis. It is often of some consequence to the character of a physician, that he be able to give a correct opinion of the issue of a disease; as he is not unfrequently, interrogated by the friends of the sick, concerning its probable termination: and if he should not be able to give them some satisfaction; or if he should, unfortunately, give a false judgment, it will often injure him, in their esteem. Therefore it is of importance to observe



attentively the phenomena of diseases, as they tend to life and health, or death: and by attending to the following symptoms, we shall be enabled to form a tolerably correct prognosis of the disease under consideration. When the delirium occurs on the first day of the disease, is ~~not~~ violent, nor the debility very great; when the breathing is not difficult, and the bleeding from the lungs, ~~is~~ profuse; and when the vomiting is manageable, the tongue not thickly furred nor of a dark colour, and the sensorium and insensibility are not very great: by good attention and the proper exhibition of medicines, we may reasonably expect a speedy recovery. But on the other hand, if the delirium occurs, on the third or fourth day of the disease, be violent, and the succeeding debility very great; if the system become torpid and insensible, the tongue thickly furred of a dark brown, or greyish red colour; and if the difficulty of breathing be considerable and that ghastly, or anxious countenance occur, the eye-lids falling over the eyes, half closing them, the nose of the nose drawn in towards the septum, and low muttering delirium occur; we may pretty certainly calculate on a fatal termination.



The cure. Often from slightly examining the pulse at the commencement of the disease, and from the pain in the side, which was sometimes acute, the Physician would be induced to prescribe balsam fuming pretty freely; but these symptoms were delusive, and that prescription universally injurious, and sometimes fatal. Drawing blood in small quantities, was likewise adopted; but with no advantage, and it sometimes proved hurtful, by inducing an unpleasant and sometime an alarming degree of debility. It being observed that a spontaneous vomiting gave relief in many cases, led to the use of emetics, which was attended with the happiest effects. They often relieved or removed the pain and oppression of the breast, and never failed to clear the stomach from bile or any offending matter, that might be in it; and the patient always appeared to be relieved by their operation. Catharticks, were usually found useful; they often relieved the pain in the sides, sometimes palliated the affection of the head, and always prepared the system for the reception of other medicines.

The advantages arising from the exhibition of sudorifics, the preceding year, gave birth to the belief, that they would <sup>be</sup> beneficial in the disease of the present; but unfortunately the past experien-



at this instance proved to be a false guide; for they were of little use, and perhaps in some cases injurious, by causing delay in the exhibition of more efficacious remedies. Blisters and sinapisms were useful remedies. Blisters were applied to the sides with the happiest effect; they seldom failed to relieve or remove the pain seated in this part. Sinapisms were applied to the feet and ankles, with the effect of removing or mitigating, the delirium and coma that occurred. The nurses and friends of the sick, became so well acquainted with this fact, that they often resorted to the use of them without the advice of the physician.

Although the above remedies, in many cases would be found sufficient to effect a recovery in all those which were violent, bellomel was the unius specie, and the patients were never considered out of danger until a phlegm was excited. This always removed the cough, and the pain in the side, if it continued after blistering. It likewise relieved the difficulty of breathing, and most of the unpleasant symptoms vanished at its touch. But it was necessary to give it in as large doses, as the patient could conveniently bear, internally; and likewise to apply it, liberally externally; in order to obtain its effects as speedily as possible, on account of the rapidity with which the disease ran its course.



Tonicks and stimulants were indispensable remedies in completing the cure, as the debility which ensued, was often the most alarming, and sometimes the most dangerous stage of the disease. Wine and brandy were used very freely, and with the effect of raising the little trembling pulse, making it more full and regular; relieving the thirst, and supporting the sinking powers of life, until the more permanent stimuli should have time to act. An infusion of Guaria, was given in many cases with advantage; it assisted in restoring the appetite, and preparing the stomach for the reception of a nourishing diet; which was always essential. The Peruvian bark and Chalybiates, in combination with the spices, were given with the happiest effects.

and the first time I have seen the outside world  
in winter. But it is now time to go back  
and make the rest ready for a night's sleep.  
The sun is up still, the moon has gone, and the  
stars are out. The sky is clear, and the ground  
is white with snow. The trees are bare,  
and the birds are silent. The air is cold, but  
not biting. The sun is bright, and the snow  
reflects its light. The world is quiet, and  
the only sound is the rustling of the snow  
as it falls. The stars twinkle brightly in the  
darkness, and the moon casts a soft glow  
over everything. The world is peaceful, and  
the silence is令人着迷.